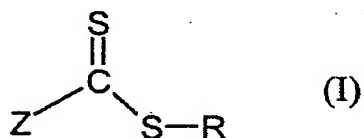


WHAT IS CLAIMED IS:

1. A compound of the formula (I),



5 where

R is a halogen-substituted alkenyl radical,

and where

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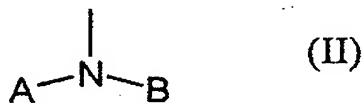
Z is either a substituted or unsubstituted heterocyclic radical which contains at least one nitrogen atom and which has linkage at one nitrogen atom to the $-\text{CS}_2\text{-R}$ group of formula (I) and which, in the parent form in which there is a hydrogen atom bonded to the nitrogen atom which has linkage to the $-\text{CS}_2\text{R}$ group of formula (I), has a pK_a value in the range from 12 to 20,

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or where

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Z is a radical of the formula (II),



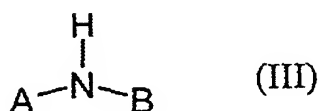
where

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A and B have been selected independently of one another from the group consisting of hydrogen, substituted or unsubstituted alkyl, substituted or unsubstituted alkenyl, substituted or unsubstituted

alkoxy, substituted or unsubstituted acyl, substituted or
unsubstituted aroyl, substituted or unsubstituted aryl, substituted or
unsubstituted heteroaryl, substituted or unsubstituted
alkylsulphonyl, substituted or unsubstituted alkylsulphinyl,
substituted or unsubstituted alkylphosphonyl, substituted or
unsubstituted arylsulphinyl and substituted or unsubstituted
arylphosphonyl,

and where the pK_a value of the protonated form of formula (III)



is in the range from 12 to 20.

2. A process for preparing the compound of the formula (I) according to
Claim 1, comprising

- a) providing a compound of the formula (IV),



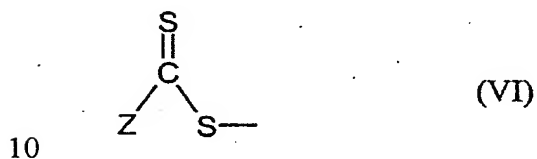
where Z is as defined in Claim 1 and M is an alkali metal,

- b) reacting this compound with a compound of the formula (V)



where R is as defined in Claim 1 and X is Cl, Br or I.

3. A process for preparing a polymer by polymerizing monomers in the presence of the compound of the formula (I) as defined in Claim 1.
4. The process according to Claim 3, where the monomers are chloroprene and/or 2,3-dichlorobutadiene.
5. A polymer obtainable by the process according to Claim 5 or 6.
6. A polymer which contains end groups of the formula (VI)



and end groups of the formula (VI a)



where Z and R are as defined in Claim 1.

7. The polymer according to Claim 7, where the polymer is polychloroprene or poly-2,3-dichlorobutadiene or polychloroprene-co-2,3-dichlorobutadiene.